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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,523	02/28/2002	Jeffrey Charles Trewella	JCT002	7718

7590 02/23/2005  
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EXAMINER

DAVIS, RUTH A

ART UNIT	PAPER NUMBER
1651	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/084,523

**Applicant(s)**

TREWELLA, JEFFREY CHARLES

**Examiner**

Ruth A. Davis

**Art Unit**

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

Applicant's Request for Continued Examination filed on November 22, 2004 and the amendment filed on July 23, 2004 have been received and entered into the case. Claims 1 – 22 are pending; claims 1 – 10 are withdrawn from consideration; claims 11 – 22 have been considered on the merits. All arguments have been fully considered.

#### ***Specification***

The abstract of the disclosure is objected to because of the recitation of the term "said" in lines 2 – 4. Correction is required. See MPEP § 608.01(b).

#### ***Claim Rejections - 35 USC § 112***

1. Rejections under 35 U.S.C. 112, first paragraph, have been withdrawn due to amendment.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 11 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyse in view of Annas.

Applicant claims a method for paying storage costs of cord blood, the method comprising dividing cord blood containing stem cells into at least two portions, selling one portion and using the monies made to pay for the second portion. The method further includes recovering the blood from a donor followed by concentrating, diluting, purifying, amplifying and stabilizing the blood before dividing the cord blood.

Boyse teaches methods for storing cord blood, the method comprising collecting blood, stabilizing, concentrating, purifying (col.18), diluting and amplifying (col.18-19) fractions of the blood for cryogenic storage.

Boyse does not teach the claimed method of payment for storing cord blood. However, Annas discloses methodologies wherein companies sell collected cord blood for therapeutic use in the event a donor cannot pay the storage costs (p.1524). As evidenced by Annas, it was known in the art that storing cord blood could become costly. At the time of the claimed invention, it would have been obvious to one of ordinary skill in the art to use any means necessary to pay for a service, to include labor and/or selling their valuables. As evidenced by Annas, cord blood was known to have monetary value. In addition, the idea of selling cord blood to pay for storage costs was known, as evidenced by Annas. At the time of the claimed invention, it would have been obvious to one of ordinary skill in the art to sell cord blood as a method of paying for storage costs, since Annas teaches such practices were known to occur and since cord blood was known to have monetary value, as evidenced by Annas. Moreover, at the

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time of the claimed invention, one of ordinary skill in the art would have been motivated to sell cord blood in order to pay for storing any remaining cord blood with a reasonable expectation for defraying those storage costs.

### ***Response to Arguments***

Applicant argues that the references do not teach dividing the cord blood into portions, and selling portions of the blood to defray storage costs; that the examiner uses impermissible hindsight; that there is no motivation to sell cord blood to pay for storing cord blood; and that the references do not teach dividing the cord blood into two portions that remain whole blood.

However, these arguments fail to persuade, because Gonzalez-Ryan teaches dividing a portion out from the sample that is stored separately (p.108), Kline teaches fractioning (dividing) the blood, Wolf teaches dividing the blood prior to storage, and Boyse teaches fractionating the cells (or dividing the blood into at least 2 portions). Furthermore, while Annas does not specifically teach selling a portion to defray costs of storing a second portion, the reference certainly teaches selling cord blood for monetary gain. At the time of the claimed invention, it would have been obvious to one of ordinary skill in the art to sell cord blood in the event that the storage costs can not be paid for its well known value, as disclosed by Annas. It would have been further obvious to one of ordinary skill in the art to maintain at least a portion of the blood, as storage of the cord blood is the purpose for needing the monetary gain. Moreover, at the time of the claimed invention, one of ordinary skill in the art would have been motivated to sell a

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portion of cord blood with a reasonable expectation for successfully paying for storing another portion.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., dividing cord blood into two portions that remain whole blood) are not recited in the rejected claims. Thus, the argument is not commensurate in scope with the claimed invention. Furthermore, the claims are clearly directed to a method wherein the processing of the cord blood occurs prior to dividing the sample. Specifically, steps of purification, concentration, dilution and amplification all occur before dividing the cord blood, indicating that the at least two portions do not remain as whole blood.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

For the reasons stated here and above, the claims are rejected.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth A. Davis whose telephone number is 571-272-0915. The examiner can normally be reached on M-H (7:00-4:30); altn. F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth A. Davis  
February 15, 2005  
AU 1651

A handwritten signature in dark ink, appearing to read 'R Davis', is positioned to the right of the typed name and date.